

Service Priorities and Programmes Electronic Presentations

Convention ID: 533

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Post title: Other(Please specify):, Princess Margaret Hospital, KWC

Improvement plan on the plumbing and drainage systems

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Keywords:

plumbing systems drainage systems

Introduction

As drain blockage and water leakage faults may lead to serious damages to the major facilities and equipment as well as affecting the hospital services, Facility Management Department (FMD) of Princess Margaret Hospital (PMH) aimed to improve the plumping and drainage systems by studying the fault and incident cases, investigating the root causes and developing improvement plans.

Objectives

1.To reduce or avoid recurrences of drain blockage and water leakage; 2.To minimize the damages of facilities due to drain blockage and water leakage.

Methodology

Fault and incident cases were reviewed. The major findings were: 1.Piecemeal system modifications without having an overall view to the entire plumbing and drainage systems 2.System design with deficiencies and aging 3.Lack of preventive measures 4.Mal-practices by user such as throwing rubbishes into the toilets and sinks The proposed improvement works based on the findings are: 1.Updating layout plans of the water distribution system during renovations and preventive survey rounds which will be done by our in-house staff 2.Planned pipe and system replacement with innovative system designs such as by-pass drainage pipes and warning pipes for high risk areas and the replacement of aged water pipes 3.Preventive checking on the plumbing and drainage systems including regular cleansing of the manhole & underground drains will be conducted 4.Issuing notices to user for reminding user on toilet etiquette which could reduce the sources of drain blockage. Also, installing strainers at sluice sinks which act as a first guard of prevention

Result

Further to the root cause analysis process, improvement plans have been arranged accordingly. From April 2012 to August 2012, there was at least one major blockage incident of drain occurred at Main Block monthly, after the improving works that we did from August to November 2012 (e.g. installation of strainer at Main Block; conducting preventive cleansing of drainage system), the similar blockage at Main Block was eliminated. By compare with April 2012 to August 2012 and August 2012 to December

2012, there was 12% reduction of water leakage and drain blockage faults and incidents. The improvement works conducted were effective to minimize the fault and incident cases, further review and improvement works would be proceed in year 2013.